Naval Aviation and Maintenance Transformation: Improving Readiness for the 21st Century

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Mech recently interviewed the Commander, Naval Air Systems Command, VADM Wally Massenburg. He had a lot to say about the transformation in naval aviation and its impact on maintenance and readiness.

VADM Massenburg discussed several programs and tools related to Naval Aviation Enterprise (NAE), including AIRSpeed, Boots on the Ground (BOG), the Naval Aviation Readiness Integrated Improvement Program (NAVRIIP), Lean, Basic Theory of Constraints (BTOC), and Six Sigma. These terms and programs may sound strange to some, but they have been around for several years, and already have allowed the fleet to reap the benefits in readiness.

BOG is an event that brings together the leadership of the NAE to walk through the AIMDs, MALS and the squadrons to hear their concerns and provide points of contact to resolve their readiness barriers.

"Shake a thousand Sailors' hands," said VADM Massenburg as he described his metric for success with BOG. "Senior leaders have to get out from behind a desk and go face the customers. Everything that 'providing organizations' do starts with Sailors and Marines and ends with Sailors and Marines. If you aren't always focused on them, you have missed the boat."

The NAE and associated programs essentially started in 1999, after the Navy's early attempts to recapitalize the force fell short. "People with good hearts said the only way to get new equipment is to get rid of the older equipment quicker," said VADM Massenburg. "But we mortgaged on the backs of our Sailors and Marines the attempt to recapitalize our force."

VADM Wally Massenburg greets a sailor while at a the NAS Jacksonville Boots on the Ground event.

The admiral mentioned that BOG allowed Sailors to vent about the lack of supply parts on the shelf, about old support equipment—much of it older than the planes we're flying—and tech pubs that were falling apart, or NATOPS manuals that hadn't been updated in three years.

He went on to explain that as budgets and buying power went down, the cost of aircraft and equipment went up. "We had to get the money from some place," VADM Massenburg commented. "That scenario made it clear that the effort to recapitalize was going to be tough."

His point, though, is that the initial strategy had to change. "Naval Aviation was a two-headed giant and each head had its own ideas," said VADM Massenburg.

A catalyst in that effort was the new CNO at the time, Admiral Vern Clark. Adm. Clark placed CNAP in charge of all naval aviation, making him the single process owner, accountable for all of its problems.

With CNAP, now called Commander Naval Air Forces (CNAF), clearly in charge and accountable, a strategy began to develop. The leadership of CNAL, NAVAIR and OPNAV saw the benefits of breaking the traditional chain of command lines and as VADM Massenburg put it, " I called VADM Malone, CNAF, and reported for duty. You see, I work for the fleet and CNAF represents what the fleet needs."

With this, a triad began to take shape. CNAF at the top directing requirements, NAVAIR at one corner as a provider, and OPNAV N-78 and N-43 in the other corner with the resources—the cash. The fleet sits in the center.

"The NAE is working to define better metrics that tie what we work on directly to readiness and aircraft ready for tasking at reduced cost. NAVRIIP and AIRSpeed are leading the way. These metrics will help the NAE manage its cost so we can afford our future aircraft without sacrificing readiness like we had to do in the past," said VADM Massenburg.

This triad began working together toward a fleet goal of aircraft ready for training by attacking the shortfalls in material readiness with NAVRIIP and it's enabler, AIRSpeed.

As the triad drilled down to the root of naval aviation's material readiness issues, it became apparent more commands would need to be brought on board. The organization expanded into the Naval

Aviation Enterprise. Composed of over 22 commands, the NAE is a forum where interdependent issues affecting multiple commands are resolved using the measurement of aircraft ready for tasking at reduced costs as the goal for all decisions. With a little stick and rudder, NAE was born.

In the early days, the work to improve readiness through the triad began to show promise. From those successes, the Naval Aviation Integrated Improvement Program (NAVRIIP) and Enterprise AIRSpeed was born. It used the tenets of Lean Manufacturing, Basic Theory of Constraints and Six Sigma, and is teaching maintainers a new language that includes a variety of tools and terms, such as value-stream mapping, the 5 Ss, Kaizen events, Kanban, and a host of others. They are part of a new revolution in thinking that is a critical part of the Naval Aviation Enterprise and something every Sailor and Marine should learn.

VADM Massenburg urged Mech to speak to the fleet about this change in maintenance, supply and readiness. He suggested we contact AIMD North Island, since they had recently transformed their work process using the above tenets.

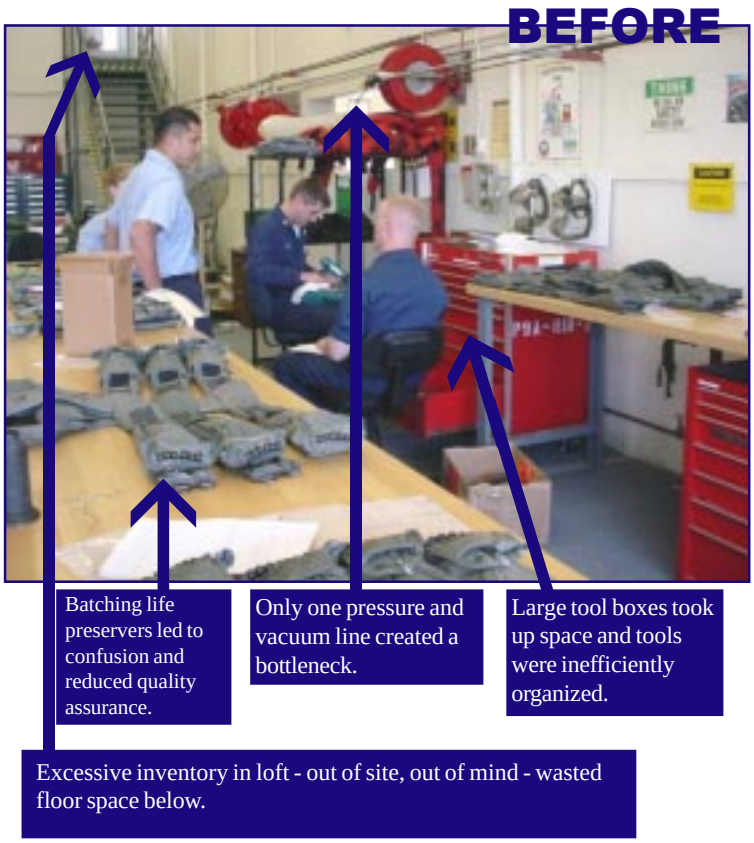
"Enterprise AIRSpeed has had a huge impact on the way we do business," said PR2(AW/SW) Jason Moore. "It was a major shift in the way we think and act. Before AIRSpeed, we might work on every part, regardless of priority. Now, we concentrate on high-priority parts and don't work on pri 3 parts with little or no demand."

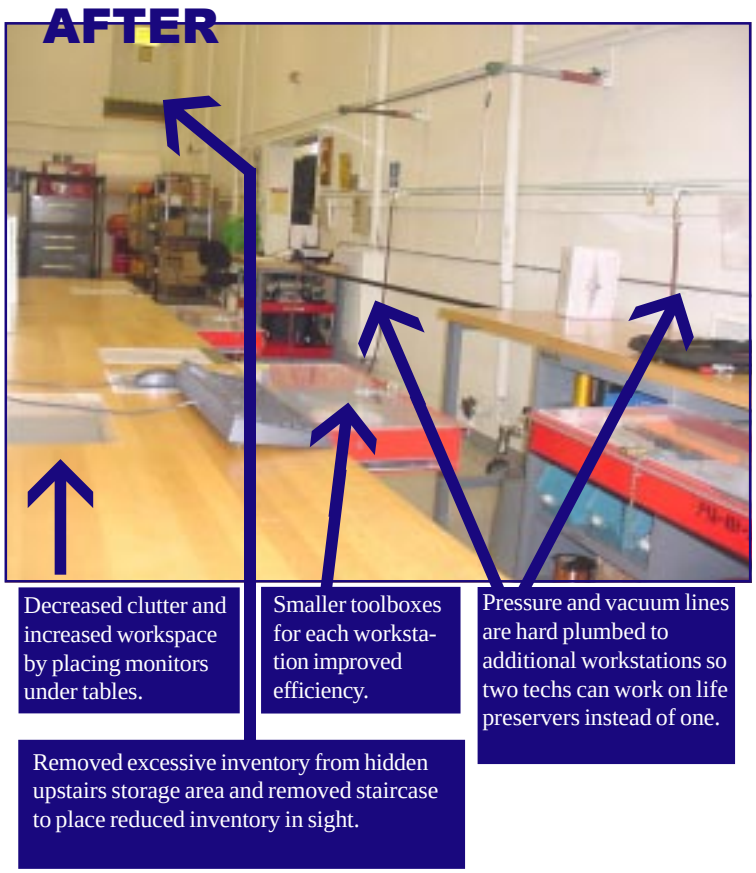
He explained that the time saved through that approach and a reorganization of work flow, tools, and consumable parts has allowed AIMD North Island to make dramatic financial savings and to produce a greater number of items of higher quality.

"In our T-700 engine shop, we reorganized the flow of work, put the right tools into our maintainers' hands, increased and moved consumables closer to the worker, and made tremendous improvement," Petty Officer Moore said. "The turnaround time went from 72 to 48 days, using the Basic Theory of Constraints and from 48 to nine days, using Lean and Six Sigma."

This transformation in naval aviation maintenance is dynamic and ensures that effective, efficient and more productive work is being done to improve current and future readiness. Petty Officer Moore said the biggest difference is that maintainers are being empowered to make change.

"AIRSpeed has changed the way we think and work," said Moore. "Earlier efforts didn't have buy-in from junior troops. Now E-1s through O-5s meet in team meetings where junior Sailors interact with senior members, get a voice in the final decision, and see their suggestions come to life. That is real change."





"We found last year that AVDLR consumptions went way down," said Massenburg, "because a Sailor on the hangar deck is being empowered and is being held accountable and responsible at his level for how much parts or equipment cost, not just for how to install them. We get away from 'smoke checking' R/Ts or using parts in supply to troubleshoot aircraft and those kinds of things. Another benefit is that our Sailors and Marines now have a way to feel proud about what they're doing, have the necessary tools and all elements of Integrated Logistics Support in place, and we have folks with the same patriotic feelings about their job and want to serve."

Bob Dylan said it best, "The Times They Are A-Changin'." The Naval Aviation Enterprise is moving forward and will be coming to a squadron near you. It's time the entire fleet prepares for the lean, clean, readiness-improvement machine.

For more information on the Naval Aviation Enterprise, AIRSpeed, NAVRIIP, and the "lean" tools mentioned, visit the Naval Aviation Enterprise website at www.cnaf.navy.mil/nae or NAVAIR site at www.cnaf.navy.mil/airspeed.